WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTER OF PATENT OF THE UNITED STATES OF AMERICA IS:

1. A process for the aromatization of hydrocarbons comprising:

a) contacting an alkane containing 2 to 6 carbon atoms per molecule with at least one catalyst containing a gallium zeolite on which platinum has been deposited; and

b) recovering the aromatic product.

2. The process of claim 1 wherein the silicon to gallium atomic ratio (Si/Ga) is greater than 5.

3. The process of claim 2 wherein the silicon to gallium atomic ratio in the range of from 5-400.

4. The process of claim wherein the silicon to gallium atomic ratio in the range of from 25-250.

5. The process of claim 1 wherein platinum is present in the range of from 0.05% to 3%.

6. The process of claim 5 wherein platinum is present in the range of from 0.2% to 2%.

7. The process of claim 6 wherein platinum is present in the range of from 0.2% to 1.5%.

8. The process of claim 1 wherein the contact between the alkane and the catalyst is at a space velocity in the range between 0.1 and 100 h^{-1}.

9. The process of claim 8 wherein the contact between the alkane and the catalyst is at a temperature in the range between 200 and 600°C.

10. The process of claim 9 wherein the contact between the alkane and the catalyst is at a pressure in the range between 5 and 215 psia.

11. The process of claim 1 wherein the zeolite has a MFI, FAU, TON, MFL, VPI, MEL, AEL, AFI, MWW or MOR structure.

12. The process of claim 11 wherein the zeolite has a MFI structure.

13. The process of claim 12 wherein the zeolite has a ZSM-5 MFI structure.

14. The process of Claim 1 wherein the sodium form of the zeolite catalyst is represented as:

$$|Na_x \cdot (H_2O)_z| [Ga_xSi_yO_{2y+3x/2}] \text{-MFI}$$

where x=0.1-25; y=60-100; and z=0.1-10.

15. A process for synthesizing a platinum-gallium zeolite catalyst comprising:

a) preparing a gallium zeolite containing silicon and gallium;

b) depositing platinum on the zeolite; and

c) calcining the zeolite.

16. The process of claim 15 wherein the platinum is deposited by cationic exchange.

17. The process of claim 15 wherein the platinum is deposited by impregnation.

18. The process of claim 15 wherein the zeolite has an MFI, FAU, TON, MFL, VPI, MEL, AEL, AFI, MWW or MOR structure.

19. The process of claim 18 wherein the zeolite has a MFI structure.

20. The process of claim 19 wherein the zeolite has a ZSM-5 MFI structure.

21. The process of claim 15 wherein the catalyst is subsequently treated first with hydrogen, second with a sulfur compound; and then again with hydrogen.

22. A platinum gallium zeolite catalyst for aromatization of hydrocarbons comprising:

a) a gallium-silicon zeolite; and

b) platinum deposited on the gallium-silicon zeolite.

23. The catalyst of claim 22 wherein the silicon to gallium atomic ratio is greater than 5.

24. The catalyst of claim 23 wherein the silicon to gallium atomic ratio in the range of from 5-400.

25. The catalyst of claim 24 wherein the silicon to gallium atomic ratio in the range of from 25-250.

26. The catalyst of claim 22 wherein platinum is present in the range of from 0.05% to 3%.

27. The catalyst of claim 26 wherein platinum is present in the range of from 0.2% to 2%.

28. The catalyst of claim 27 wherein platinum is present in the range of from 0.2% to 1.5%.

29. The catalyst of claim 22 wherein the pore size of the zeolite is in the range from 2 to 200 angstroms.

30. The catalyst of claim 29 wherein the pore size of the zeolite is in the range from 2 to 100 angstroms.

31. The catalyst of claim 30 wherein the pore size of the zeolite is in the range from 2 to 20 angstroms.

32. The catalyst of claim 22 wherein the zeolite has a MFI, FAU, TON, MFL, VPI, MEL, AEL, AFI, MWW or MOR structure.

33. The catalyst of claim 22 wherein the zeolite has a MFI structure.

34. The catalyst of claim 22 wherein the zeolite has a ZSM-5 MFI structure.

35. The catalyst of claim 22 wherein the catalyst is represented by the formula

$$|Na_x \cdot (H_2O)_z| [Ga_xSi_yO_{2y+3x/2}] \text{-MFI}$$

where x=0.1-25; y=60-100; and z=0.1-10.

36. The catalyst of claim 22 wherein its X-ray diffraction pattern has peaks at 11.19, 9.98, 9.77, 6.37, 5.99, 3.86, 3.82, 3.76, 3.72 and 3.65 angstroms.